



Tab 8

Report on High School Graduates Performance

Coordinating Board for Higher Education

March 5, 2024

BACKGROUND

The Coordinating Board for Higher Education's *Missouri Report on High School Graduates Performance* tracks Missouri's public high school graduates entering the state's public two- and four-year degree-granting postsecondary institutions as first-time, full-time, degree-seeking undergraduate students in the fall semester following their high school graduation. The annual report, first issued in 1996, provides information to secondary and postsecondary stakeholders regarding student preparation, persistence, and completion.

The law that authorizes the CBHE to prepare the annual report (§ 173.750, RSMo) describes the report's contents, which must include "grade point averages after the initial college year...; the percentage of students returning to college after the first and second half of the initial college year, or after each trimester of the initial college year; the percentage of students taking noncollege level classes in basic academic courses during the first college year, or remedial courses in basic academic subjects of English, mathematics, or reading; and other such data as determined by rule and regulation of the coordinating board for higher education."

CURRENT STATUS

Overall postsecondary enrollment of public high school graduates in public in-state colleges and universities decreased by a small amount in the past year. Total enrollment of recent high school graduates declined 0.3 percent from fall 2022 to 2023. Total enrollment in remediation continues to decline, from 15.5 percent in 2022 to 14.6 percent in 2023.

Fall-to-fall persistence increased in the past year. Of the incoming 2022 cohort, 77.9 percent re-enrolled in a public institution in fall 2023, compared to 76.3 percent from 2021 to 2022. Fifty-five percent of incoming students in fall 2017 had earned a degree or certificate from a public two- or four-year institution by spring 2023. This is a slight increase from 54.5 percent for the 2016 cohort.

Enrollment and Preparation

This year's report provides data about postsecondary enrollment and preparation of the public high school graduating class of 2023. Total enrollment of same-year Missouri public high school graduates in Missouri public institutions decreased by 0.3 percent from 18,592 first-time full-time degree-seeking undergraduates in 2022 to 18,539 in 2023, while the same group has declined 15.8 percent from 2013. Total public high school graduates increased by less than 0.1 percent in Missouri from 2022 to 2023.

First-time, full-time, degree-seeking undergraduates who were recent Missouri public high school graduates continue to become slightly more diverse each year. Black students increased to 7.8 percent of the cohort, Hispanic /Latino students increased to 7.0 percent, and Other / Unknown students (including multiracial students) increased to 7.7 percent of the total cohort. Detailed summary tables are included in the attachment to this item.

DHEWD supports the work of postsecondary institutions to encourage development of multiple math pathways and multiple measures for course placement, ensuring that only students who truly need remediation receive it, and that the form of remediation they receive is the most effective for both content mastery and career readiness. The department will continue to analyze the impact of corequisite supports—a form of remedial education designed to be taken at the same time as the college-level gateway course. The *2020 Report on College and Career Readiness* found that the corequisite model, when implemented, tends to lead to higher pass rates for the gateway course (math or English/writing) than the prerequisite model.

However, these successes are not equitably distributed across student populations – Black Missourians, adult Missourians and low-income Missourians are overrepresented in prerequisite remedial courses, which can lead to higher college costs and longer time to degree completion. National research also corroborates these findings – a December 2021 report from Complete College America found that the corequisite model yielded positive outcomes when implemented at the University System of Georgia. However, it also noted that Black students, Hispanic / Latino/a students, and low-income students were more likely to be placed in the prerequisite model.

Remedial Participation of Recent Missouri Public High School Graduates in Public Postsecondary Institutions					
	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Total	19.8%	17.3%	16.9%	15.5%	14.6%
Math	15.9%	13.1%	12.5%	11.0%	10.2%
English	7.2%	6.5%	7.2%	7.1%	6.8%
Reading	4.4%	3.7%	3.3%	3.0%	2.5%

Other Trends in Enrollment and Preparation

- Overall enrollment in remedial coursework and enrollment in remedial math has declined each year since fall 2012. Enrollments in remedial English, math, and reading have decreased for each of the last two years.
- Enrollment in non-credit (non-corequisite) remediation has historically been higher for women than men, although women tended to later persist and complete a degree or certificate at higher rates. In fall 2023, however, 15.2 percent of women and 13.8 percent of men were enrolled in at least one remedial course.
- Overall remedial enrollment and enrollment in math remediation continued to decline for most racial/ethnic groups, and although racial/ethnic gaps persist in enrollment, they are decreasing. In 2023, 22.7 percent of Black students were enrolled in at least one remedial course, compared to 13.2 percent of White students. This gap (9.5 percentage points) was 23.1 percentage points in fall 2019. The gap for math remediation was 4.4 percentage points, down from 18.0 in 2019. Similarly, 19.9 percent of Hispanic / Latino/a students were enrolled in at least one remedial course, a gap of 6.7 percentage points with White students, compared to 11.2 in fall 2019.

Performance and Retention in College

The *Report on High School Graduates Performance* also tracks several measures of student success and persistence in Missouri's public postsecondary sector. This year's report provides data on performance and retention in college for the public high school graduating class of 2022. Detailed summary tables are included in the attachment to this item. Among the more significant findings for this cohort are:

- Fall-to-fall retention, which has been generally stable in recent years, is 77.9 percent for the incoming fall 2022 cohort. Fall-to-fall retention rates ranged from 65.0 percent for Black students to 87.4 percent for Asian/Pacific Islander students. Additionally, 79.1 percent of White students re-enrolled, as did 76.6 percent of Hispanic / Latino/a students.
- On average, this cohort completed 33.9 credits by the end of the spring 2023 term with a 3.06 grade point average (a slight increase from the prior year's cohort). Asian/Pacific Islander students completed 37.5 credits with a 3.20 GPA, Black students completed 24.9 credits with a 2.52 GPA, and White students completed 35.0 credits with a 3.12 GPA. Women completed 35.2 credits with a 3.11 GPA compared to men, who completed 32.4 credits with a 3.00 GPA. Credits completed include dual/advanced credit completed prior to enrollment.
- Students at two-year institutions (open admissions) completed 26.5 credits through spring 2023 with a 2.91 GPA. Students at four-year institutions, including open admissions and moderately selective, selective, and highly selective institutions completed 40.5 credits through spring 2023 with a 3.19 GPA.

Degree Completion

The timely completion of a certificate or degree is an additional indication of how well-prepared Missouri's high school graduates are for college-level work. Detailed tables in the attachment to this item show the six-year degree completion rate of students beginning college in the fall of 2017. The findings include:

- 55.0 percent of incoming public Missouri high school students who entered as a first-time full-time degree-seeking undergraduate in fall 2017 had earned a degree or certificate from a public Missouri college or university by spring 2023. This is a slight increase from the rate for the 2016 cohort (54.5 percent). This rate does not account for transfer to or completion from an independent or out-of-state institution.
- 38.2 percent had earned a bachelor's degree, 20.2 percent earned an associate degree, 3.2 percent earned a graduate or professional degree within six years, while 9.8 percent earned an undergraduate certificate. Compared to the previous cohort, a slightly higher percentage earned associate degrees, and slightly fewer completed a bachelor's degree.
- Racial and ethnic disparities do persist; 65.2 percent of Asian/Pacific Islanders and 58.9 percent of White students earned a degree or certificate within six years, as did 31.2 percent of Black students and 46.1 percent of Hispanic / Latino/a students.

NEXT STEPS

Department staff will continue to work on several fronts to encourage increased enrollment and persistence among recent high school graduates. To that end, DHEWD will continue outreach

efforts to support increased FAFSA filing to encourage students to become more aware of their financial aid options, which also supports improved persistence and completion.

Furthermore, the Department has been leading the Adult Learner Network to address ways the postsecondary education and training system can be more accessible to and supportive of adult learners. This includes examining credit for prior learning and experience to help accelerate adults' time to degree, as well as collaborating with state and national organizations to better integrate equity into its work.

RECOMMENDATION

This is an information only item.

ATTACHMENTS

- Attachment A: Enrollment and Preparation, Performance and Retention in College, and Degree Completion Tables

Tab 8, Attachment A

Enrollment and Preparation, Performance and Retention in College, and Degree Completion Tables

Enrollment and Preparation

Table 1: Recent Public Missouri High School Graduate Enrollment by Sector, Gender, and Race/Ethnicity, 2013 to 2023													
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	10-Year % Change	1-Year % Change
Overall Enrollment	22,022	22,593	21,426	21,836	22,160	22,067	20,850	19,529	18,606	18,592	18,539	-15.8%	-0.3%
Two-Year	10,394	10,693	9,295	9,771	10,423	10,401	9,899	9,378	9,330	9,276	8,940	-14.0%	-3.6%
	47.2%	47.3%	43.4%	44.7%	47.0%	47.1%	47.5%	48.0%	50.1%	49.9%	48.2%		
Four Year	11,628	11,900	12,131	12,065	11,737	11,666	10,951	10,151	9,276	9,316	9,599	-17.4%	3.0%
	52.8%	52.7%	56.6%	55.3%	53.0%	52.9%	52.5%	52.0%	49.9%	50.1%	51.8%		
Women	12,171	12,437	11,808	11,985	12,275	12,169	11,675	10,968	10,392	10,348	10,295	-15.4%	-0.5%
	55.3%	55.0%	55.1%	54.9%	55.4%	55.1%	56.0%	56.2%	55.9%	55.7%	55.5%		
Men	9,836	10,147	9,609	9,841	9,872	9,881	9,161	8,534	8,130	8,179	8,147	-17.2%	-0.4%
	44.7%	45.0%	44.9%	45.1%	44.5%	44.8%	43.9%	43.7%	43.7%	44.0%	43.9%		
Black / African-American	2,208	2,112	2,010	2,140	2,060	1,987	1,794	1,471	1,287	1,370	1,439	-34.8%	5.0%
	10.0%	9.2%	9.4%	9.8%	9.3%	9.0%	8.6%	7.5%	6.9%	7.4%	7.8%		
White	17,209	17,773	16,769	17,008	17,184	17,036	15,925	15,201	14,478	14,187	13,885	-19.3%	-2.1%
	78.1%	76.1%	78.3%	77.9%	77.5%	77.2%	76.4%	77.8%	77.8%	76.3%	74.9%		
Hispanic / Latino/a	772	862	845	885	1,019	1,074	1,169	1,085	1,150	1,210	1,299	68.3%	7.4%
	2.1%	2.8%	3.9%	4.1%	4.6%	4.9%	5.6%	5.6%	6.2%	6.5%	7.0%		
Asian / Pacific Islander	485	547	497	489	483	489	531	484	542	517	496	2.3%	-4.1%
	2.2%	2.4%	2.3%	2.2%	2.2%	2.2%	2.5%	2.5%	2.9%	2.8%	2.7%		
Other / Unknown	1,348	1,299	1,305	1,314	1,414	1,481	1,431	1,288	1,149	1,308	1,420	5.3%	8.6%
	7.5%	9.6%	6.1%	6.0%	6.4%	6.7%	6.9%	6.6%	6.2%	7.0%	7.7%		

Data Source: Enhanced Missouri Student Achievement Study (EMSAS)

Table 2: Recent Missouri Public High School Graduate Enrollment in Remediation by Institutional Admissions Selectivity; 2019 to 2023

	2019	2020	2021	2022	2023
Selective	7.2%	4.5%	6.4%	4.5%	5.0%
Math	6.5%	3.9%	5.5%	4.2%	4.3%
English	1.2%	0.8%	1.4%	0.5%	1.0%
Reading	-	-			
Mod Selective	14.0%	18.8%	22.3%	20.4%	15.6%
Math	9.8%	12.7%	14.6%	13.9%	9.1%
English	6.2%	7.7%	9.8%	8.7%	8.2%
Reading	0.5%	0.2%			
Open	30.7%	26.1%	22.9%	21.6%	21.6%
Math	24.7%	19.8%	17.1%	15.0%	15.1%
English	11.6%	10.1%	10.3%	10.8%	10.7%
Reading	8.4%	7.2%	6.3%	5.5%	4.8%

Source: Enhanced Missouri Achievement Study (EMSAS)

Table 3: Recent Missouri Public High School Graduate Enrollment in Remediation by Gender; 2019 to 2023

	2019	2020	2021	2022	2023
Women	21.3%	18.3%	17.6%	15.5%	15.2%
Math	17.8%	14.1%	13.1%	10.8%	10.6%
English	7.2%	6.6%	7.3%	7.2%	7.3%
Reading	4.6%	4.3%	3.5%	3.0%	2.5%
Men	17.9%	16.0%	16.0%	15.4%	13.8%
Math	13.5%	11.7%	11.7%	11.2%	9.6%
English	7.2%	6.3%	7.0%	6.9%	6.2%
Reading	4.2%	3.0%	3.0%	2.9%	2.5%

Source: Enhanced Missouri Achievement Study (EMSAS)

**Table 4: Recent Missouri Public High School Graduate Enrollment in Remediation
by Race / Ethnicity; 2019 to 2023**

	2019	2020	2021	2022	2023
Black / African-American	39.7%	32.2%	31.5%	26.3%	22.7%
Math	31.4%	24.6%	23.3%	17.4%	13.9%
English	18.6%	15.2%	16.6%	15.4%	14.0%
Reading	16.2%	11.4%	11.2%	9.6%	8.5%
White	16.6%	15.2%	15.2%	13.8%	13.2%
Math	13.4%	11.5%	11.2%	10.0%	9.5%
English	5.5%	5.3%	6.0%	5.8%	5.7%
Reading	2.5%	2.6%	2.4%	1.9%	1.6%
Hispanic / Latino/a	27.8%	22.7%	22.3%	21.5%	19.9%
Math	22.2%	17.5%	16.8%	14.4%	13.8%
English	10.5%	8.7%	10.7%	10.2%	10.2%
Reading	7.8%	5.4%	5.0%	5.6%	4.8%
Asian / Pacific Islander	14.3%	11.4%	9.4%	9.1%	10.5%
Math	11.5%	8.1%	7.0%	5.4%	5.0%
English	5.5%	4.5%	6.5%	6.2%	6.9%
Reading	5.1%	3.3%	3.1%	3.9%	2.2%
Other / Unknown	26.5%	23.0%	20.9%	19.9%	16.3%
Math	21.3%	16.8%	15.3%	13.9%	11.6%
English	10.0%	9.4%	8.3%	9.6%	7.8%
Reading	8.2%	7.3%	4.6%	4.6%	2.9%

Source: Enhanced Missouri Achievement Study (EMSAS)

Performance and Retention in College

**Table 5: Recent Missouri Public High School Graduate Retention by Gender and Race/Ethnicity;
Fall 2022 - Fall 2023**

	Students	Completed Fall 2022	Avg. Fall 2022 GPA	Avg. Credits Completed (Fall 2022)	Completed Spring 2023	Avg. Spring 2023 GPA	Avg. Credits Completed (Spring 2023)	Enrolled Fall 2023
Female	10,348	97.9%	3.02	22.9	87.6%	3.11	35.2	78.4%
Black / African-American	797	96.4%	2.43	14.8	78.9%	2.63	25.7	65.4%
White	7,872	98.1%	3.10	24.2	88.4%	3.17	36.5	79.8%
Hispanic / Latino/a	707	98.2%	2.81	18.9	86.0%	2.90	31.2	76.2%
Asian / Pacific Islander	269	98.1%	3.18	26.9	91.8%	3.23	39.6	87.4%
Other / Unknown	703	97.4%	2.91	21.0	88.1%	2.97	32.6	76.2%
Male	8,179	97.9%	2.89	21.1	86.7%	3.00	32.4	77.4%
Black / African-American	567	97.0%	2.23	14.2	81.3%	2.37	23.7	64.4%
White	6,269	97.9%	2.96	21.9	87.4%	3.06	33.2	78.4%
Hispanic / Latino/a	498	98.6%	2.73	19.2	83.5%	2.90	31.2	77.1%
Asian / Pacific Islander	247	98.4%	3.06	22.7	90.3%	3.17	35.2	87.4%
Other / Unknown	598	97.7%	2.82	19.6	86.3%	2.90	30.7	75.1%
Total	18,592	97.9%	2.96	22.1	87.2%	3.06	33.9	77.9%
Black / African-American	1,370	96.6%	2.34	14.5	79.9%	2.52	24.9	65.0%
White	14,187	98.0%	3.04	23.1	87.9%	3.12	35.0	79.1%
Hispanic / Latino/a	1,210	98.3%	2.78	19.0	85.0%	2.90	31.2	76.6%
Asian / Pacific Islander	517	98.3%	3.12	24.8	91.1%	3.20	37.5	87.4%
Other / Unknown	1,308	97.6%	2.87	20.4	87.3%	2.94	31.8	75.7%

Source: Enhanced Missouri Achievement Study (EMSAS)

**Table 6: Recent Missouri Public High School Graduate Retention by Sector and Race/Ethnicity;
Fall 2022 - Fall 2023**

	Students	Completed Fall 2022	Avg. Fall 2022 GPA	Avg. Credits Completed (Fall 2022)	Completed Spring 2023	Avg. Spring 2023 GPA	Avg. Credits Completed (Spring 2023)	Enrolled Fall 2023
Public 2Y	9,276	97.0%	2.75	17.4	81.6%	2.91	26.5	69.0%
Black / African-American	578	95.7%	2.01	11.2	73.9%	2.30	19.2	56.4%
White	7,159	97.1%	2.83	18.2	82.1%	2.98	27.2	69.7%
Hispanic / Latino/a	710	97.7%	2.58	15.4	81.1%	2.73	25.8	70.4%
Asian / Pacific Islander	212	96.7%	2.79	17.9	83.0%	2.98	27.0	77.4%
Other / Unknown	617	96.4%	2.68	15.6	83.3%	2.77	24.6	68.9%
Public 4Y	9,316	98.7%	3.17	26.7	92.8%	3.19	40.5	86.8%
Black / African-American	792	97.3%	2.59	16.9	84.3%	2.66	28.5	71.3%
White	7,028	98.8%	3.25	28.1	93.9%	3.25	42.0	88.8%
Hispanic / Latino/a	500	99.2%	3.05	24.1	90.4%	3.12	38.1	85.4%
Asian / Pacific Islander	305	99.3%	3.34	29.5	96.7%	3.32	43.8	94.4%
Other / Unknown	691	98.6%	3.04	24.5	90.9%	3.07	37.7	81.8%

Source: Enhanced Missouri Achievement Study (EMSAS)

Degree Completion

Table 7: Recent Missouri Public High School Graduate Six-Year Completion Rate by Gender and Race/Ethnicity; Fall 2017 through Spring 2023

	Students	Total Completions	% Completed Certificate	% Completed Associate	% Completed at Least Bachelor's	% Completed Graduate / Professional
Female	12,275	57.4%	10.5%	21.7%	39.8%	3.8%
Black / African-American	1,251	33.3%	5.1%	9.8%	25.0%	1.0%
White	9,434	61.7%	10.9%	23.8%	42.5%	4.2%
Hispanic / Latino/a	565	48.7%	14.2%	19.6%	32.9%	1.4%
Asian / Pacific Islander	262	63.0%	11.8%	15.6%	50.8%	9.2%
Other / Unknown	763	48.0%	10.7%	19.0%	32.4%	2.6%
Male	9,872	52.1%	8.9%	18.5%	36.1%	2.5%
Black / African-American	809	28.1%	5.8%	8.8%	19.7%	1.2%
White	7,741	55.6%	9.0%	20.1%	38.4%	2.6%
Hispanic / Latino/a	453	43.0%	12.1%	13.7%	29.6%	2.0%
Asian / Pacific Islander	221	67.9%	11.3%	11.8%	58.8%	5.0%
Other / Unknown	648	41.0%	9.0%	16.2%	26.1%	1.9%
Total	22,160	55.0%	9.8%	20.2%	38.2%	3.2%
Black / African-American	2,060	31.2%	5.4%	9.4%	22.9%	1.1%
White	17,184	58.9%	10.0%	22.1%	40.7%	3.5%
Hispanic / Latino/a	1,019	46.1%	13.2%	17.0%	31.4%	1.7%
Asian / Pacific Islander	483	65.2%	11.6%	13.9%	54.5%	7.2%
Other / Unknown	1,414	44.8%	9.9%	17.8%	29.4%	2.3%

Source: Enhanced Missouri Student Achievement Study (EMSAS)

Table 8: Recent Missouri Public High School Graduate Six-Year Completion Rate by Institutional Admissions Selectivity; Fall 2017 through Spring 2023

	Students	Total Completions	% Completed Certificate	% Completed Associate	% Completed at Least Bachelor's	% Completed Graduate/Professional
Highly Selective	854	76.8%	2.0%	5.2%	72.8%	12.2%
Selective	6,377	69.9%	11.1%	3.4%	66.2%	6.7%
Moderately Selective	3,577	55.9%	4.8%	5.4%	51.9%	2.7%
Open	11,352	44.7%	11.2%	35.5%	15.5%	0.7%

Source: Enhanced Missouri Student Achievement Study (EMSAS)